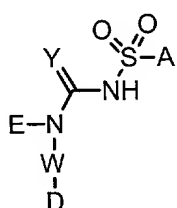


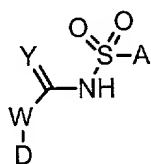
The claimed invention is:

1. A compound selected from the group consisting of formula (I), formula (II), formula (III), formula (IV), formula (V), formula (VI), formula (VII) and formula (VIII):

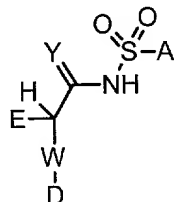
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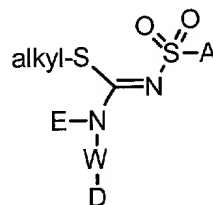
I



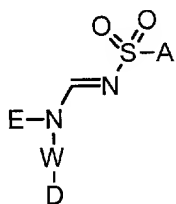
II



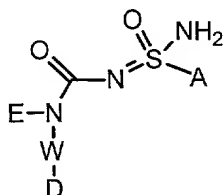
III



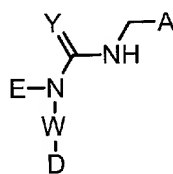
IV



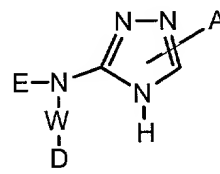
V



VI



VII



VIII

wherein:

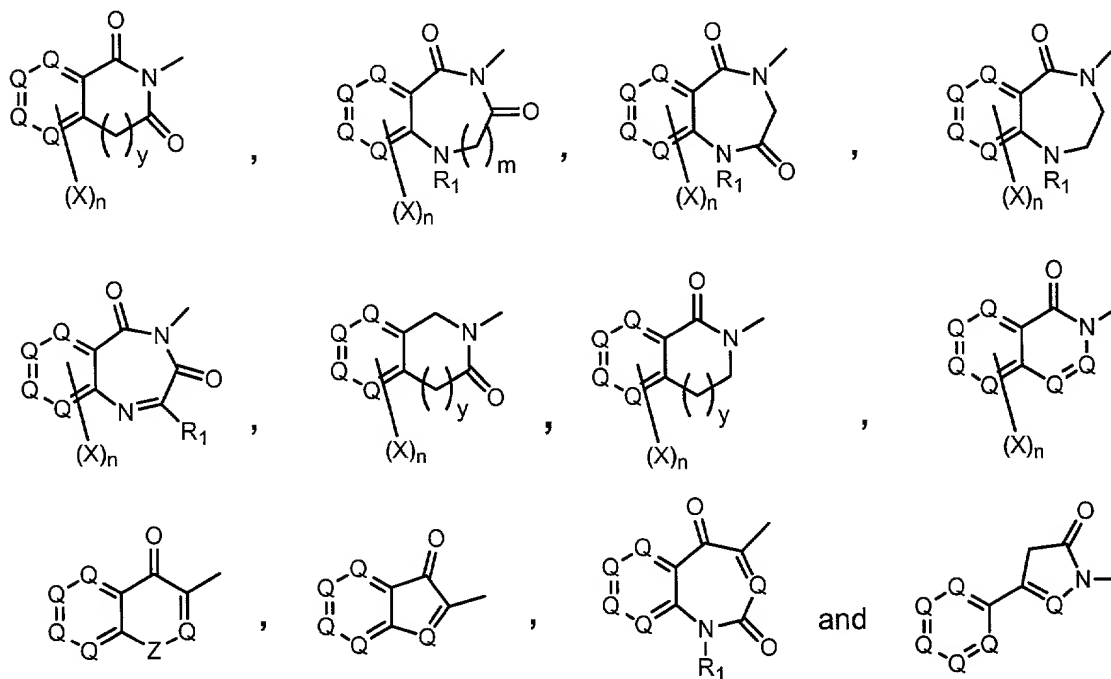
A is selected from the group consisting of aryl, substituted aryl, heteroaryl, substituted heteroaryl, alkylaryl, and alkylheteroaryl;

W is selected from the group consisting of aryl, substituted aryl, heteroaryl, and substituted heteroaryl;

E is selected from the group consisting of H, -C₁-C₈ alkyl, polyhaloalkyl, -C₃-8-cycloalkyl, aryl, alkylaryl, substituted aryl, heteroaryl, and substituted heteroaryl;

15

D is selected from the group consisting of $-\text{NR}^1-(\text{C}=\text{O})-\text{R}^2$, $-\text{O}-\text{R}^1$;



wherein:

R^1 is independently selected from the group consisting of:

- 5 H, C_1 - C_8 alkyl, polyhaloalkyl, $-\text{C}_{3-8}$ -cycloalkyl, aryl, alkylaryl, substituted aryl, heteroaryl, substituted heteroaryl, $-(\text{C}=\text{O})-\text{C}_1$ - C_8 alkyl, $-(\text{C}=\text{O})$ -aryl, $-(\text{C}=\text{O})$ -substituted aryl, $-(\text{C}=\text{O})$ -heteroaryl and $-(\text{C}=\text{O})$ -substituted heteroaryl;

R^2 is independently selected from the group consisting of: aryl, substituted aryl, heteroaryl, and substituted heteroaryl, or

- 10 R^1 and R^2 can be direct linked or can be indirectly linked through a carbon chain that is from 1 to about 8 carbon atoms in length,

n is an integer from 0-4,

m is an integer from 0 or 1,

y is an integer from 0-4 and

Q is independently C or N, wherein when Q is a ring carbon atom, each ring carbon atom is independently substituted by X, wherein

X is in each case a member independently selected from the group consisting of:

hydrogen, halogen, polyhaloalkyl, -OR³, -SR³, -CN, -NO₂, -SO₂R³, -C₁₋₁₀-alkyl,
-C₃₋₈-cycloalkyl, aryl, aryl-substituted by 1-4 R³ groups, amino, amino-C₁₋₈-alkyl,
C₁₋₃-acylamino, C₁₋₃-acylamino-C₁₋₈-alkyl, C₁₋₆-alkylamino, C₁₋₆-alkylamino C₁₋₈
alkyl, C₁₋₆ dialkylamino, C₁₋₆ dialkylamino C₁₋₈ alkyl, C₁₋₆ alkoxy, C₁₋₆ alkoxy-C₁₋₆-alkyl,
carboxy-C₁₋₆-alkyl, C₁₋₃-alkoxycarbonyl, C₁₋₃-alkoxycarbonyl- C₁₋₆-alkyl,
carboxy C₁₋₆ alkyloxy, hydroxy, hydroxy C₁₋₆ alkyl, and a 5 to 10 membered
fused or non-fused aromatic or nonaromatic heterocyclic ring system, having 1 to
4 heteroatoms independently selected from N, O, and S, with the proviso that the
carbon and nitrogen atoms, when present in the heterocyclic ring system, are
unsubstituted, mono- or di- substituted independently with 0-2 R⁴ groups,

wherein R³ and R⁴ are each independently selected from the group
consisting of:

hydrogen, halogen, -CN, -NO₂, -C₁₋₁₀ alkyl, C₃₋₈-cycloalkyl, aryl,
amino, amino-C₁₋₈-alkyl, C₁₋₃-acylamino, C₁₋₃-acylamino-C₁₋₈-alkyl, C₁₋₆-alkylamino, C₁₋₆-alkylamino C₁₋₈ alkyl, C₁₋₆
dialkylamino, C₁₋₆ dialkylamino C₁₋₈ alkyl, C₁₋₆ alkoxy, C₁₋₆
alkoxy-C₁₋₆-alkyl, carboxy-C₁₋₆-alkyl, C₁₋₃-alkoxycarbonyl,
C₁₋₃-alkoxycarbonyl-C₁₋₆-alkyl, carboxy-C₁₋₆-alkyloxy, hydroxy,
hydroxy-C₁₋₆-alkyl, -thio and thio-C₁₋₆-alkyl;

Y is selected from the group consisting of O, S, N-OR⁵, and NR⁵,

wherein R⁵ is selected from the group consisting of:

H, C₁₋₁₀ alkyl, C₃₋₈-cycloalkyl, NR², and CN; and

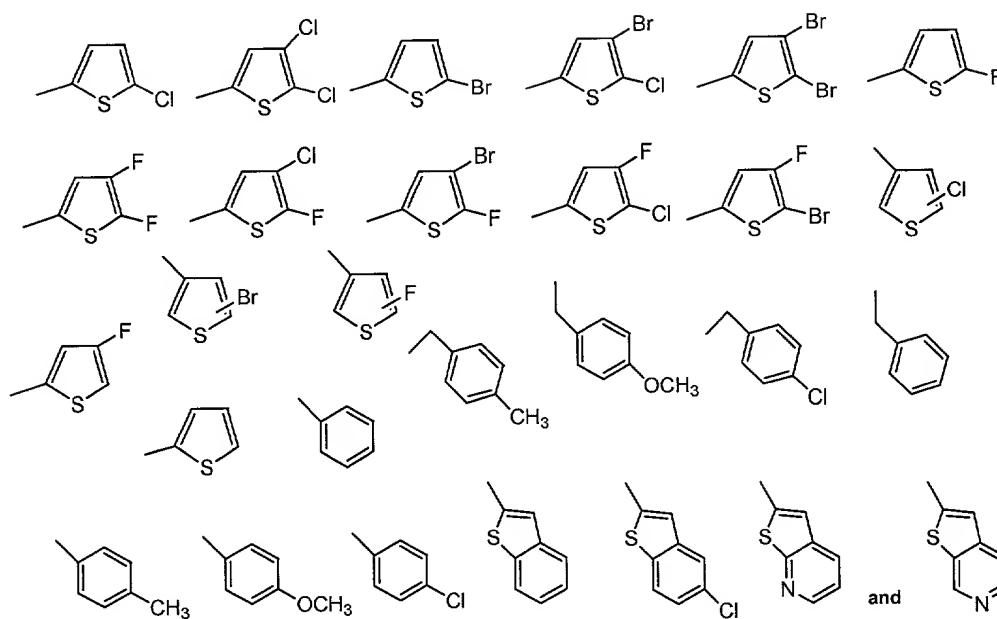
Z is selected from the group consisting of NR¹ and O;

or pharmaceutically acceptable salts and prodrugs.

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2. A compound according to claim 1, wherein:

5 A is selected from the group consisting of:

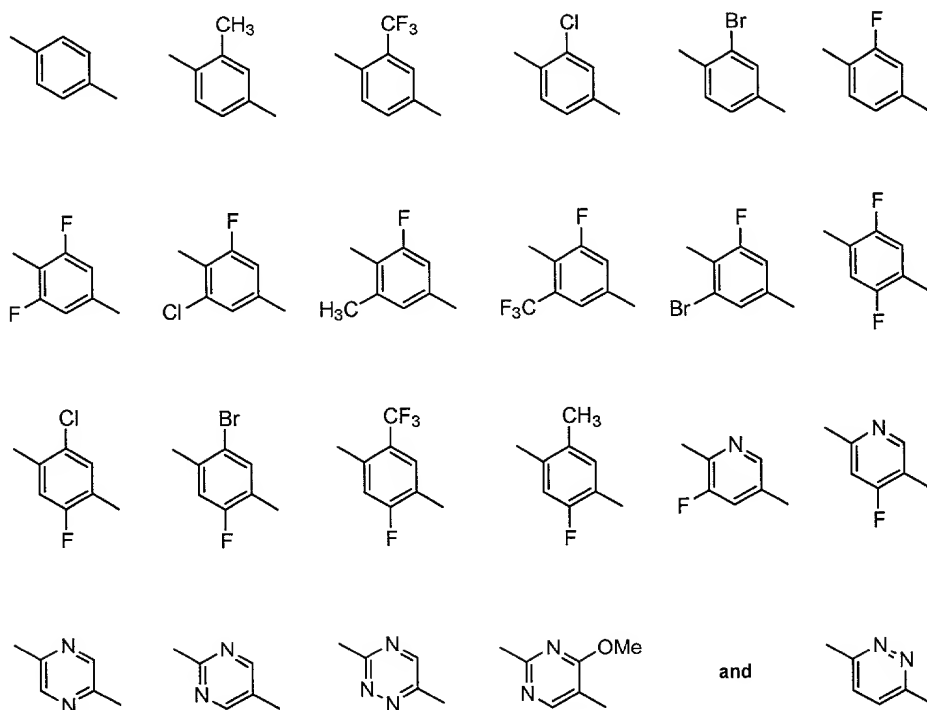


Y is selected from the group consisting of O, S, N-OR⁵ and NR⁵.

10

E is selected from the group consisting of H, or C₁₋₈ alkyl.

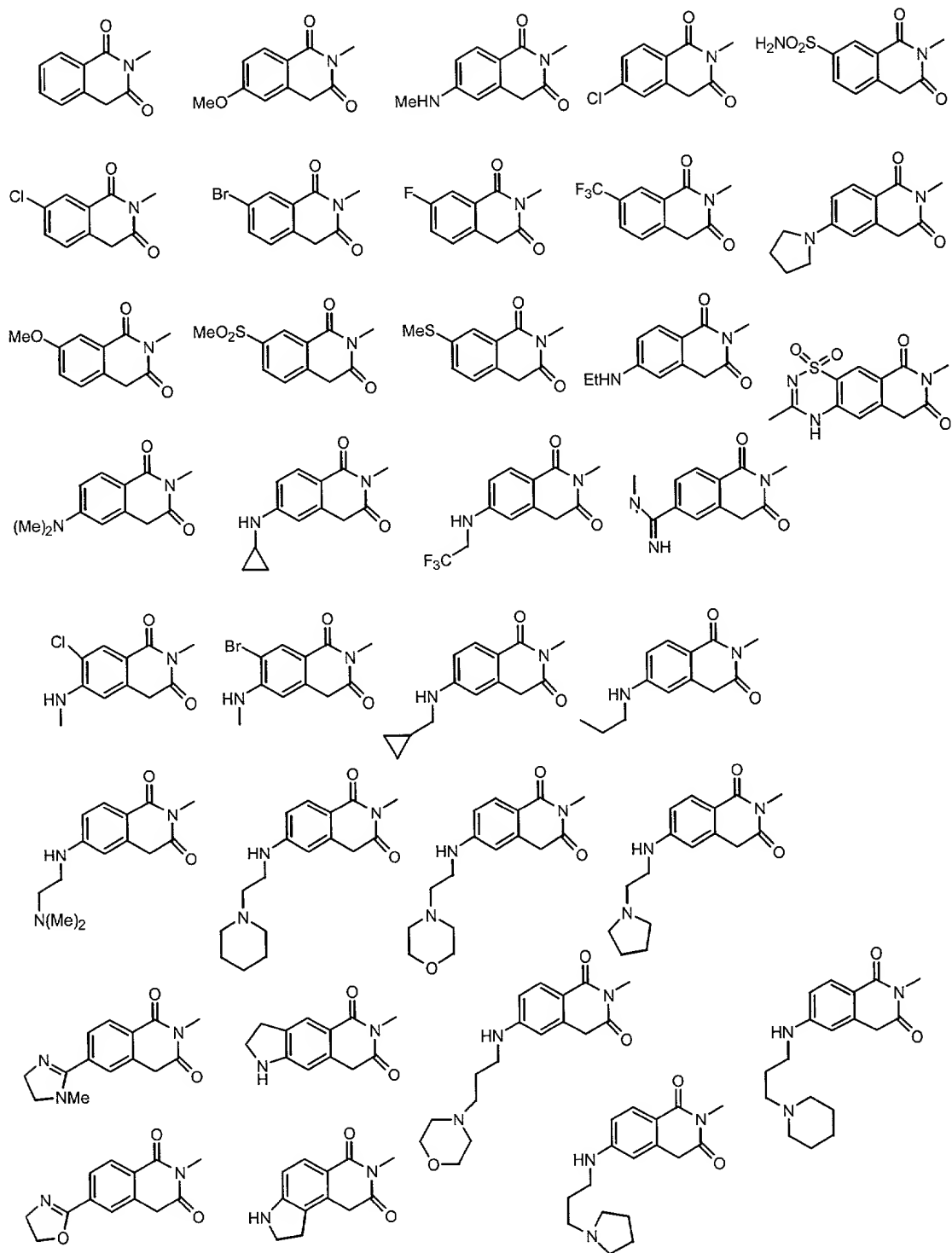
W is selected from the group consisting of:

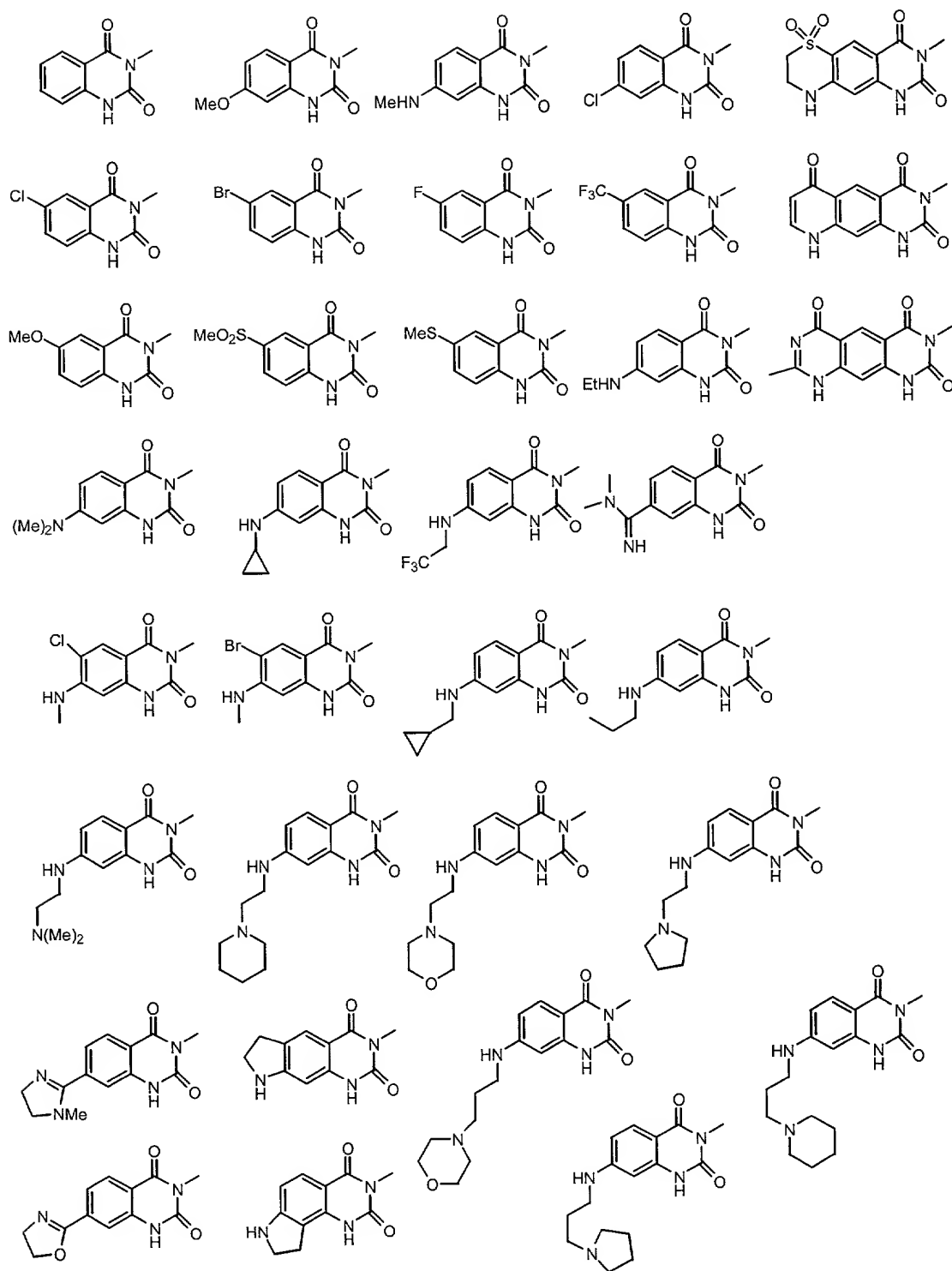


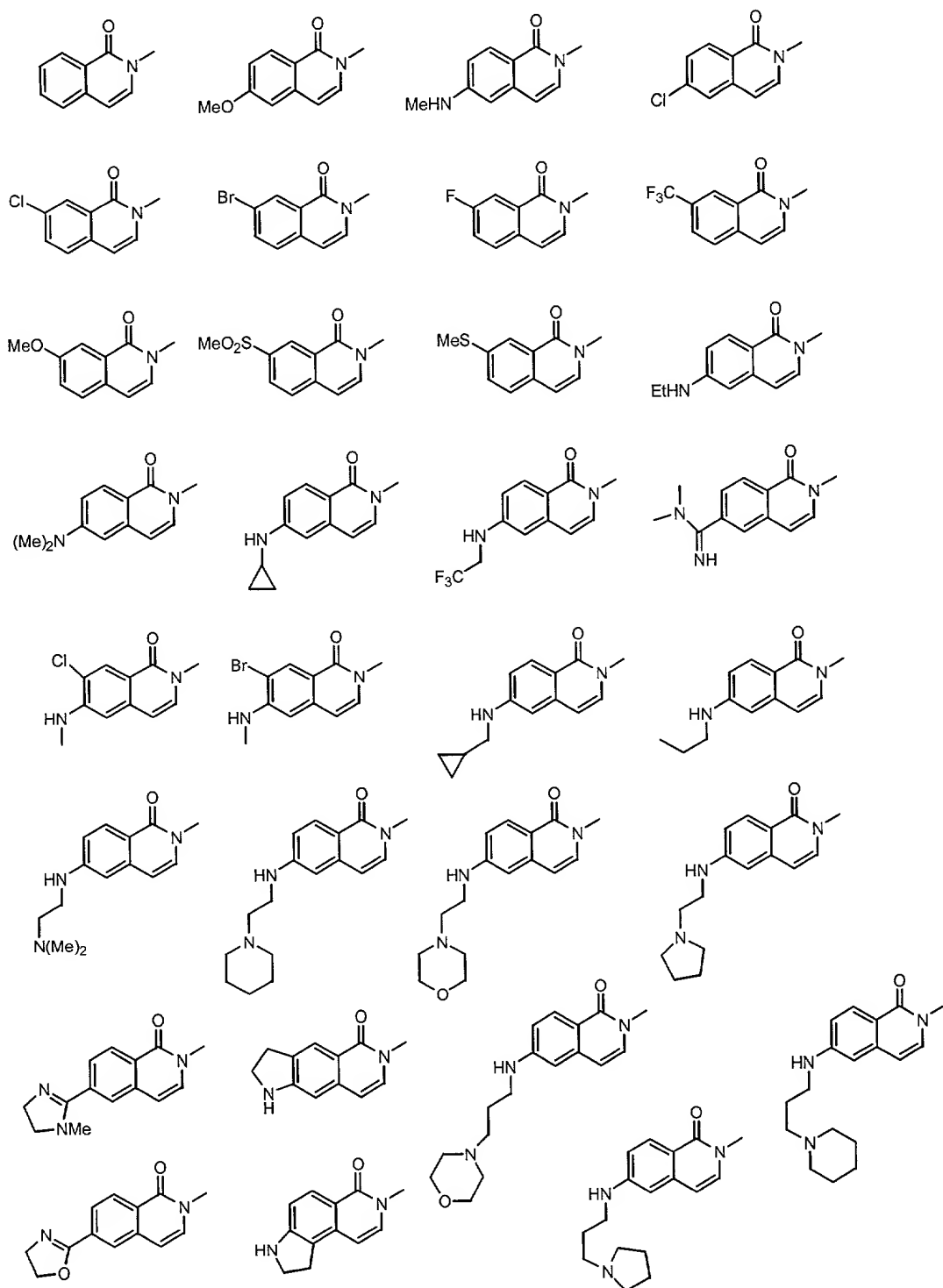
5

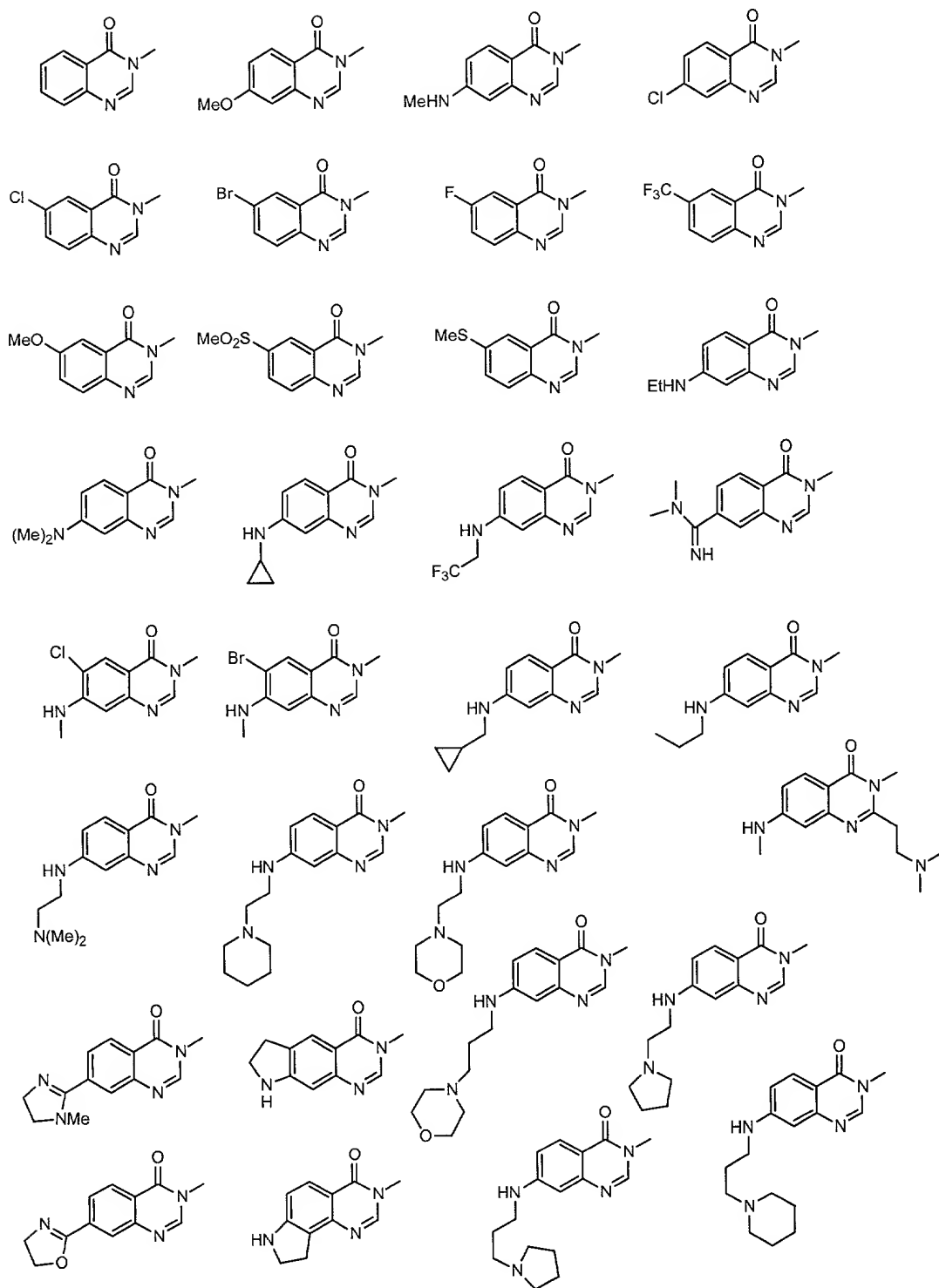
3. A compound according to claim 1, wherein:

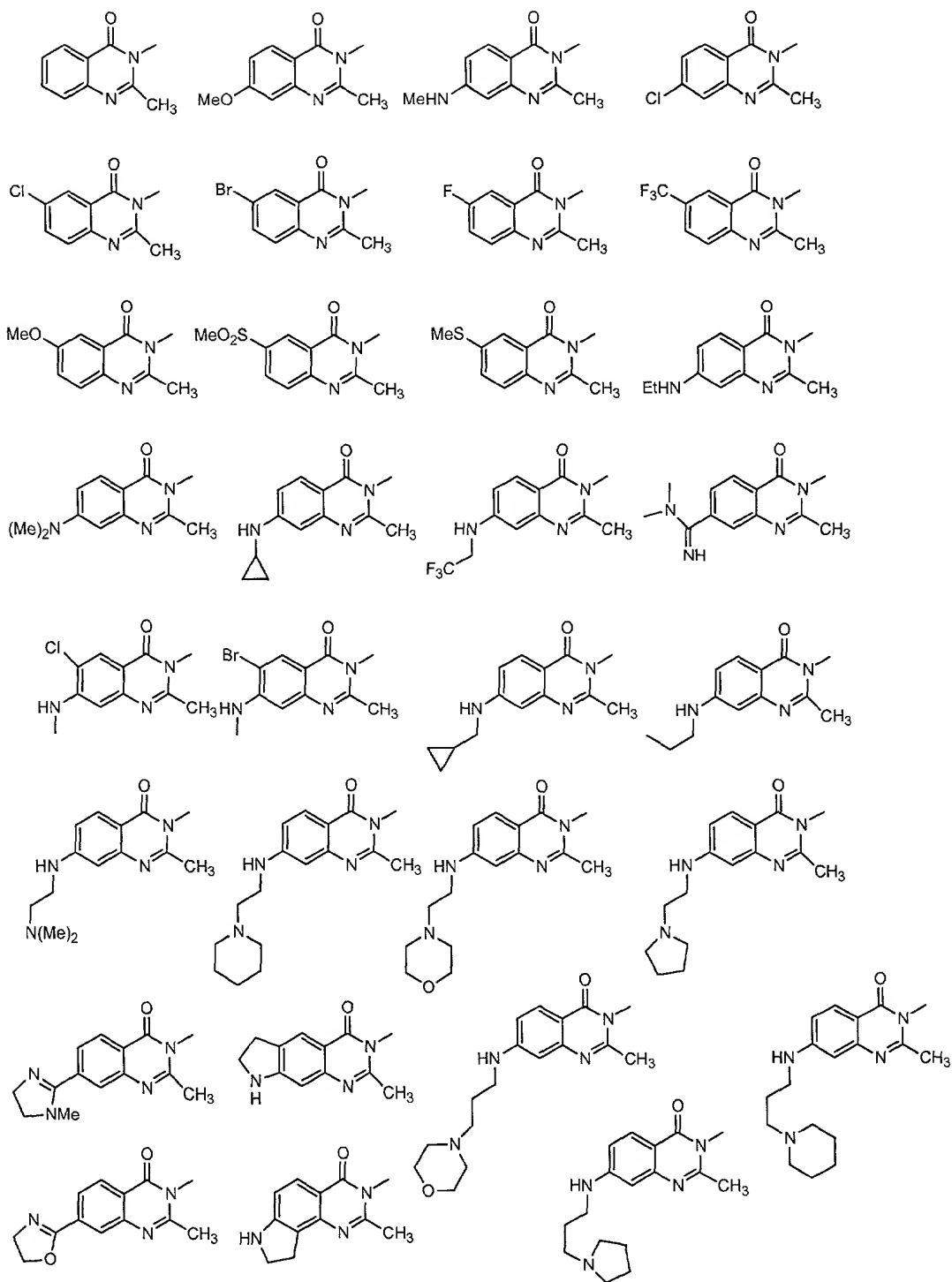
D is selected from the group consisting of:



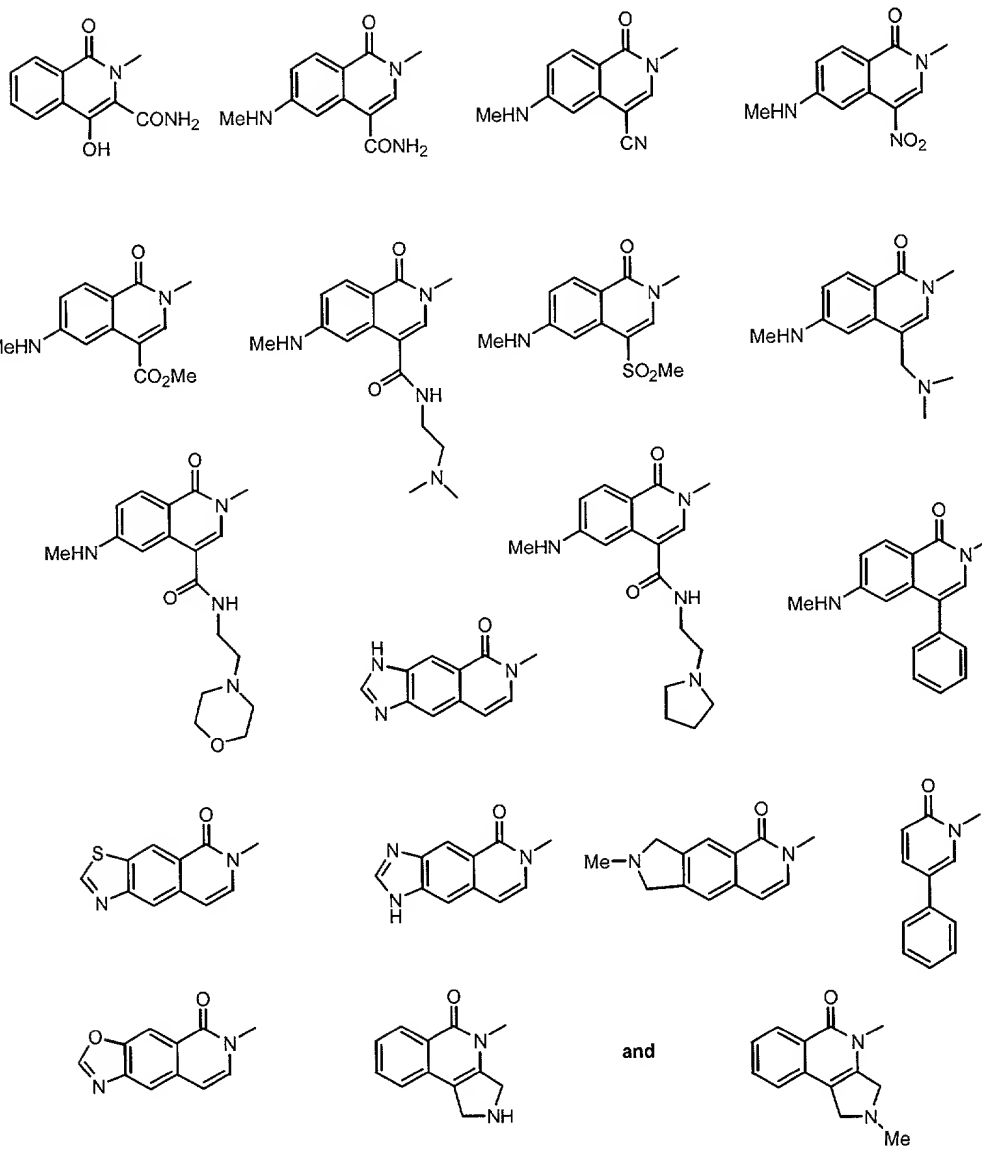




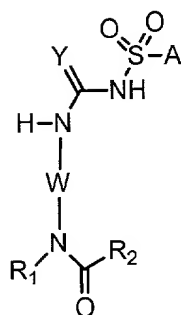




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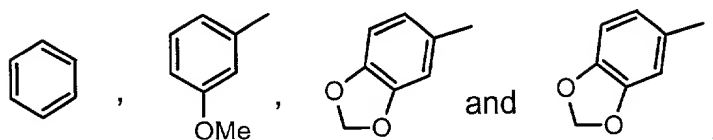
4. A compound according 1, having the following formula:



5

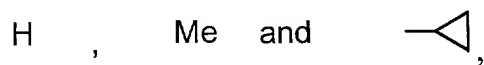
wherein:

R₂ is selected from the group consisting of:

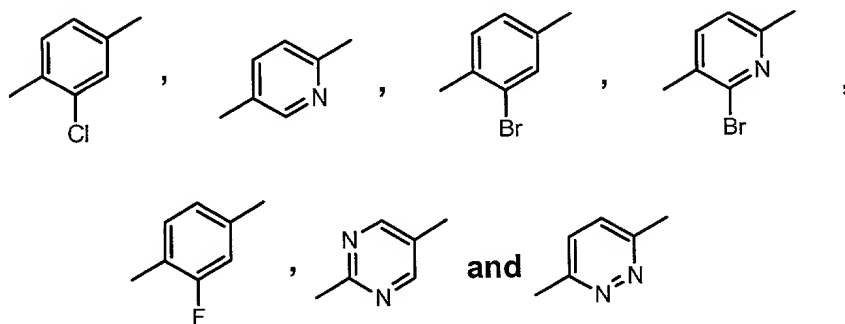


10

R₁ is selected from the group consisting of:




W is selected from the group consisting of:

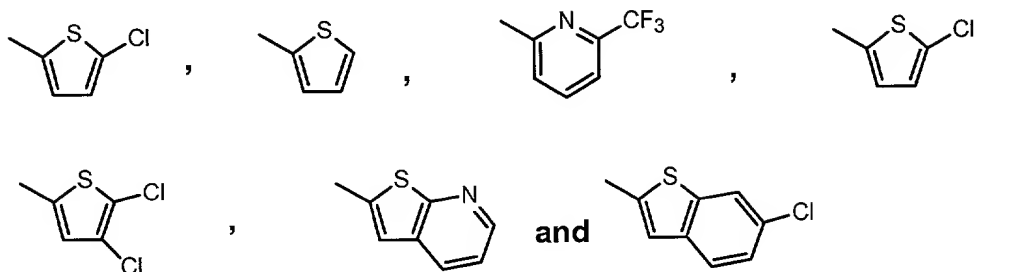


15

Y is selected from the group consisting of:

O , S , N-C≡N , NH and , and

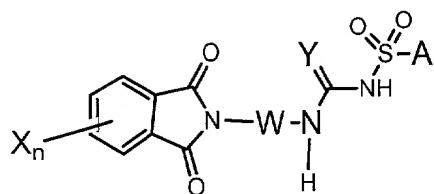
A is selected from the group consisting of:



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5. A compound according to claim 1, having the following formula,



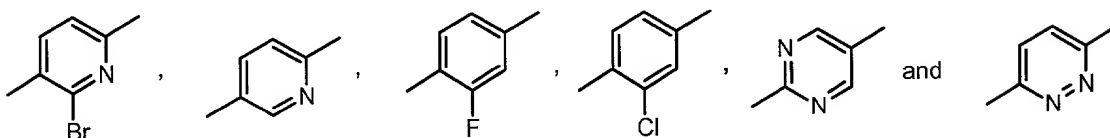
5 wherein:

n is an integer from 0-4;

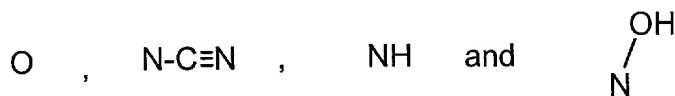
X is selected from the group consisting of:

3-Br, 3-Cl, 4-OMe, H, 3-SO₂Me, 3-N(Me)₂ and 3,4,-dimethyl;

10 W is selected from the group consisting of:

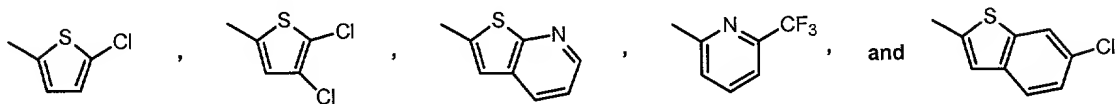


Y is selected from the group consisting of:



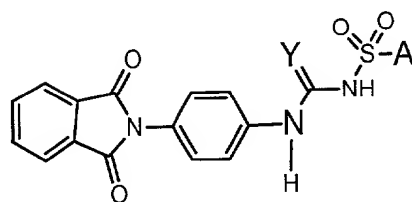
15

A is selected from the group consisting of:



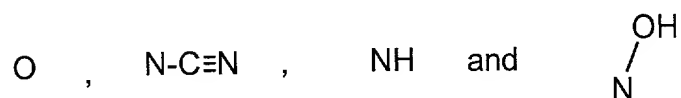
20

6. A compound of claim 1, having the following formula:

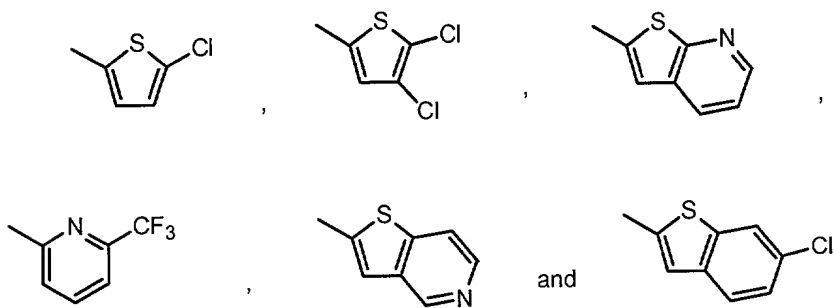


wherein:

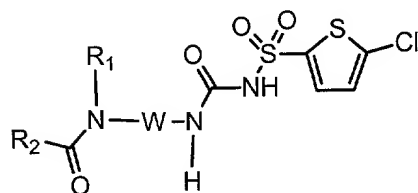
- 5 Y is selected from the group consisting of:



A is selected from the group consisting of:

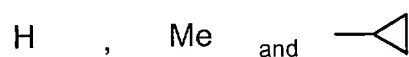


7. A compound of claim 1, having the following formula:

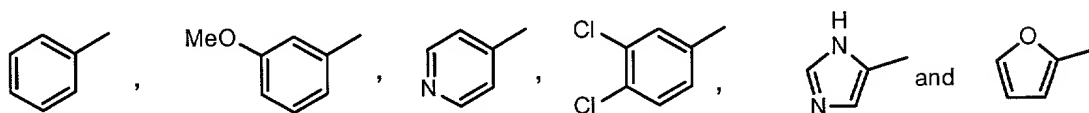


5 wherein

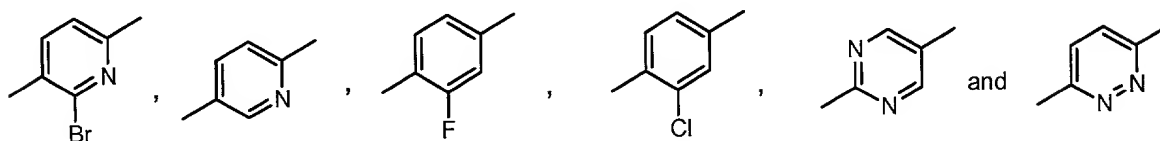
R₁ is selected from the group consisting of:



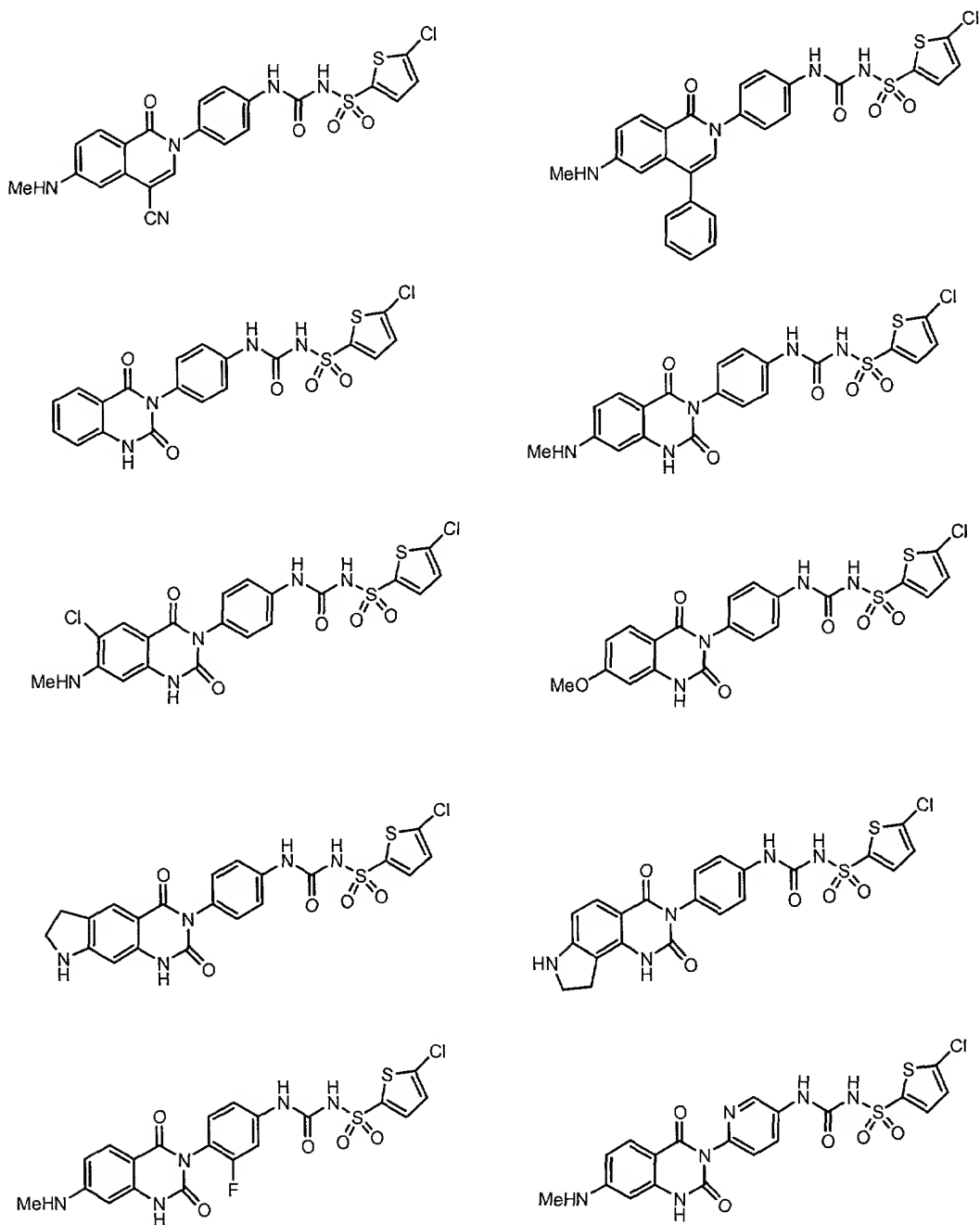
R₂ is selected from the group consisting of:

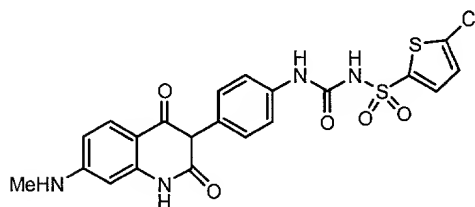
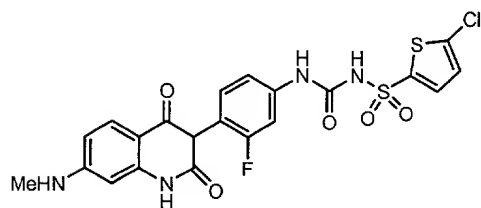
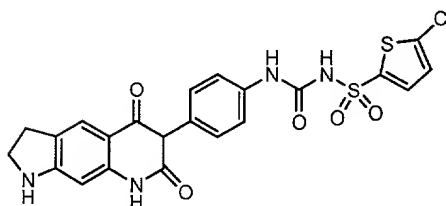
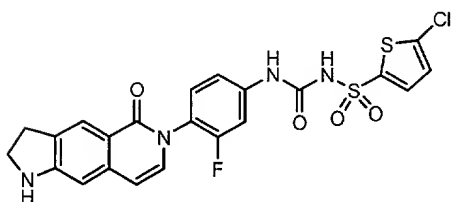
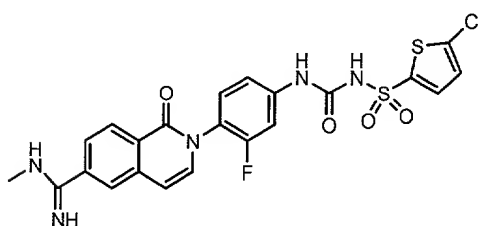
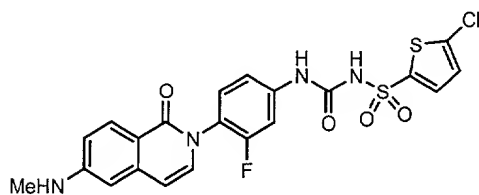
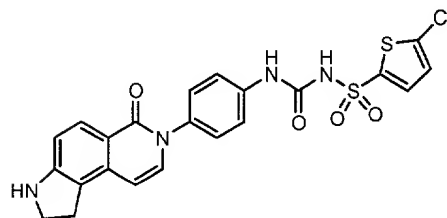
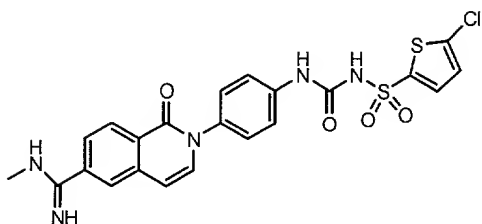
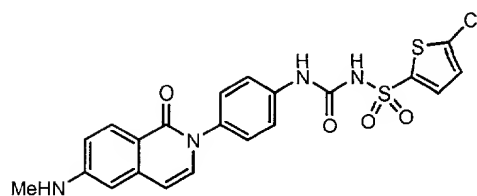
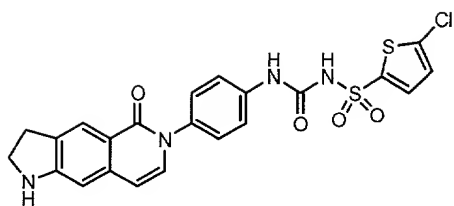


W is selected from the group consisting of:



8. A compound of claim 1, selected from the group consisting of:





9. A pharmaceutical composition for preventing or treating thrombosis in a mammal comprising a therapeutically effective amount of a compound according to claim 1, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

5

10. A pharmaceutical composition of claim 9, wherein said therapeutically effective amount is an amount effective to inhibit platelet aggregation in the mammal.

10 11. A pharmaceutical composition of claim 10, wherein said platelet aggregation is platelet ADP-dependent aggregation.

12. A pharmaceutical composition of claim 11, wherein said mammal is a human.

15 13. A pharmaceutical composition of claim 9, wherein said compound is an effective inhibitor of [³H]2-MeS-ADP binding to platelet ADP receptors.

20 14. A pharmaceutical composition for preventing or treating thrombosis in a mammal comprising a therapeutically effective amount of a compound according to claim 8, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

15. A pharmaceutical composition of claim 14, wherein said therapeutically effective amount is an amount effective to inhibit platelet aggregation in the mammal.

25 16. A pharmaceutical composition of claim 15, wherein said platelet aggregation is platelet ADP-dependent aggregation.

17. A pharmaceutical composition of claim 16, wherein said mammal is a human.

30 18. A pharmaceutical composition of claim 14, wherein said compound is an effective inhibitor of [³H]2-MeS-ADP binding to platelet ADP receptors.

19. A method for preventing or treating thrombosis in a mammal comprising the step of administering to a mammal a therapeutically effective amount of a compound of claim 1 or a pharmaceutically acceptable salt thereof.

5 20. A method of claim 19, wherein said mammal is a human.

21. A method of claim 19, wherein said mammal is prone to or suffers from a cardiovascular disease.

10 22. A method of claim 19, wherein said cardiovascular disease is at least one selected from the group consisting of acute myocardial infarction, unstable angina, chronic stable angina, transient ischemic attacks, strokes, peripheral vascular disease, .
preeclampsia/eclampsia, deep venous thrombosis, embolism, disseminated intravascular coagulation and thrombotic cytopenic purpura, thrombotic and restenotic complications
15 following invasive procedures resulting from angioplasty, carotid endarterectomy, post CABG (coronary artery bypass graft) surgery, vascular graft surgery, stent placements and insertion of endovascular devices and prostheses.

20